

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

[1-10. (Cancelled).]

11. (Currently Amended) A tube plate for a chemical reactor or heat exchanger, adapted to hold a bundle of tubes, said tube plate comprising:

a first ~~perforated~~ plate component perforated to receive a first plurality of tubes of the bundle and having a first facing edge thereof;

a second ~~perforated~~ plate component perforated to receive a second plurality of tubes of the bundle and having a second facing edge thereof, said facing edges having mating complementary surfaces that enable said first and second perforated components to be joined so as to form a smooth interface therebetween; and

a plurality of pin fasteners extending through said complementary surfaces of said first and second perforated components to thereby form a connection between said first and second perforated components.

12. (Currently Amended) ~~The tube according to claim 11,~~ A tube plate adapted to hold a bundle of tubes, said tube plate comprising:

a first perforated component having a first facing edge thereof;

a second perforated component having a second facing edge thereof, said facing edges having mating complementary surfaces that enable said first and second perforated components to be joined so as to form a smooth interface therebetween; and

a plurality of pin fasteners extending through said complementary surfaces of said first and second perforated components to thereby form a connection between said first and second perforated components;

wherein the connection of said first and second perforated components includes welds between heads of said ~~pins~~ pin fasteners and at least one of said first and second perforated components.

6-
(cont)
13. (Previously Presented) The tube plate according to claim 11 wherein said first and second perforated components are each semi-circular in shape and joined to one another along a median line defined by said first and second facing edges.

14. (Currently Amended) ~~The tube plate of claim 11~~ A tube plate adapted to hold a bundle of tubes, said tube plate comprising:

a first perforated component having a first facing edge thereof;

a second perforated component having a second facing edge thereof, said facing edges having mating complementary surfaces that enable said first and second perforated components to be joined so as to form a smooth interface therebetween; and

a plurality of pin fasteners extending through said complementary surfaces of said first and second perforated components to thereby form a connection between said first and second perforated components;

wherein said first and second perforated components are welded along said first and second facing edges.

15. (Previously Presented) The tube plate of claim 13 wherein said first and second perforated components are welded along said first and second facing edges.

6.
(cont)
16. (Previously Presented) The tube plate of claim 11 wherein said complementary surfaces include a projection along said first facing edge and a cavity along said second facing edge.

17. (Currently Amended) A tube plate ~~for holding~~ for a chemical reactor or heat exchanger, adapted to receive a plurality of tubes, said tube plate comprising first and second semi-circular plate components joined together mechanically along a smooth interface defined by a pair of facing straight edges, respectively, of said first and second semi-circular components, each of said semi-circular components having a plurality of perforations for receiving individual ones of said tubes.

18. (Currently Amended)) ~~The tube plate of claim 17~~ A tube plate for holding a plurality of tubes, said tube plate comprising first and second semi-circular components joined together mechanically along a smooth interface defined by a pair of facing straight edges, respectively, of said first and second semi-circular components, each of said semi-circular components having a plurality of perforations for receiving individual ones of said tubes;

wherein said first and second semi-circular components are joined along said pair of facing straight edges by welding.

61
(cont)
19. (Previously Presented) The tube plate of claim 17 wherein said first and second semi-circular components are joined along said pair of facing straight edges by a plurality of pins.

20. (Previously Presented) The tube plate of claim 19 wherein said pins are welded to one of said first and second semi-circular components.

21. (Previously Presented) The tube plate of claim 18 wherein said first and second semi-circular components are joined along said pair of facing straight edges by a plurality of pins.

22. (Previously Presented) The tube plate of claim 21 wherein said pins are welded to one of said first and second semi-circular components.

23. (Currently Amended) A tube plate for holding a plurality of tubes in a chemical reactor or heat exchanger, said tube plate comprising first and second semi-circular plate components joined together mechanically along a pair of facing straight edges, respectively, of said first and second semi-circular components, each of said semi-circular components having a plurality of perforations for receiving individual ones of said tubes; said first semi-circular component provided with a projection along one of said pair of facing straight edges and said second semi-circular component provided with a cavity along the other of said pair of facing straight edges, said projection received within said cavity so as to form a smooth connecting interface between said first and second semi-circular components.

24. (Cancelled).

25. (Currently Amended) ~~The tube plate of claim 23~~ A tube plate for holding a plurality of tubes, said tube plate comprising first and second semi-circular components joined together mechanically along a pair of facing straight edges, respectively, of said first and second semi-circular components, each of said semi-circular components having a plurality of perforations for receiving individual ones of said tubes; said first semi-

circular component provided with a projection along one of said pair of facing straight edges and said second semi-circular component provided with a cavity along the other of said pair of facing straight edges, said projection received within said cavity so as to form a smooth connecting interface between said first and second semi-circular components; and wherein a plurality of pins extend through said first and second semi-circular components including said projection, along said pair of facing straight edges; and further wherein said smooth connecting interface includes welds between heads of said plurality of pins and at least one of said first and second perforated components.

26. (Previously Presented) The tube plate of claim 25 wherein said first and second semi-circular components are joined along said pair of facing straight edges by welding.